Chapter 227

Waterloo, Towa



Tower Talk

2015 Newsletter Award Winner

John Livingston

May 2016

Upcoming Events:

May Events

- 3 Tuesday, 7:00

 Board Meeting, Airport

 Conference Room
- 7 Saturday, 8:30
 Breakfast, Cedar Falls Family Restaurant
- 17 Tuesday, 7:00
 Chapter Meeting, Airport
 Conference Room

lowa DOT Calendar: www.iowadot.gov/aviation

Inside this Issue:April Meeting Program

ALO Air Traffic Controllers

From the ALO Airport Director	2
Fly Outs to Lone Rock, Ames & Rushford by John Bender	3
Fly Outs to Dubuque & Prairie du Chein by John Bender	4
Fly Out to Independence by John Bender	5

- Winter is a Great Time to Fly 5
 Little Planes! by John Dutcher
- Tech Notes Where's 7
 Sherlock When You Need
 Him? by Mike Lewis
- Aircraft Anniversaries at
 AirVenture from eaa.org
- EAA Partners with FAA, Dynon **9**For STC Breakthrough
 from eaa.org
- 227 Leadership Contacts 10

Runway Zero

by Warren Brecheisen, Chapter 227 President

The FAA reauthorization bill I mentioned in last month's column, was passed by the Senate with a 95 to 3 margin and has been sent to the House. There is a good article that describes the key provisions relative to general aviation in the EAA Hot-Line publication. Now would be an excellent time to contact your representatives asking their support for this important legislation.

Several of our members attended the flight breakfast at the Independence Airport last Saturday. The food was much better than the average flight breakfast. It was very tempting to go back for seconds. I also saw several friends from the Cedar Rapids area that I hadn't seen for a while.

A flight safety seminar on flying taildraggers was held in conjunction with the flight breakfast. Some of you may recall that at this event last year a Cessna 195 was badly damaged in a

landing accident. The pilot involved spoke about what happened explaining that basically the strong direct crosswind coupled with the turbulence generated by the hangars bit him. It was both informative and entertaining as he had a good sense of humor about the incident. Following that, Jonathan Walter, the Independence Airport Manager, talked about flying tail-Specific topics draggers. included differences from flying tricycle gear planes and landing techniques. He emphasized that a pilot who flies a taildragger should be proficient in executing both wheel and three point landings.

I attended the Airport Commission Meeting on April 26th. Of special interest to our chapter was the issue of charging for the use of the

storage room. The Commission is in agreement that the advertising for the airport that we are providing in the newsletter, web page and Facebook page as well as the other events and event support that we provide justifies our use of the storage room at no cost. The FAA has to approve it, but at this time it appears that will happen.

The monthly breakfast will be in the Cedar Falls Family Restaurant next Saturday, May 7th at 8:30am. The May chapter meeting will be on the 17th at 7:00pm in the meeting room at the airport terminal.

Let's get some daylight between the tires and the ground!

> Warren Brecheisen President, EAA Chapter 227



Page 2 Chapter 227 Waterloo, Iowa

April Meeting Program: Waterloo Air Traffic Controllers

Thank you
Waterloo
Air Traffic
Controllers

Following the April Chapter Meeting, we had the exciting opportunity to welcome four of the Waterloo Airport Traffic Controllers. In the photo (from left to right) are: Keith, NATCA Facility Representative; 227 member Tim Roberts (and daughter), Controller; Jill, Facility Supervisor; Larry, Controller (soon to be Emeritus). They enlightened us with current and upcoming information. Larry shared some of his background and experiences during his 16 years at ALO, his opportunity as a Controller during AirVenture and his upcoming retirement on July 31st. We followed up with a what's good and bad and a question and answer exchange.



Above all, the controllers encourage pilots to communicate. They want to know, for example, when you don't understand them, when you desire clarification or when you are a student; they are here to help and they want you to know that you can reach out to them.

We thank the ALO Controllers for joining us. It is especially significant to us to be able to associate a face with a voice and the conversation was very valuable for us. We appreciate their time, willingness and all that they do to support our safety and General Aviation.

From the ALO Airport Director, Keith Kaspari:



Passenger Traffic at the Waterloo Regional Airport increased significantly during the First Quarter of 2016 placing the airport in a promising position for continued growth as the preferred airport in the region. Read this recent Press Release:

Waterloo Regional Airport Reports Continued Increases in Passengers Using the Airport

Changes to the flight schedule for Spring and Summer have been announced at the Waterloo Regional Airport. American Airlines is adding an additional flight on Saturdays over the Summer beginning June 4th. Below is the April Press Release:

Waterloo Regional Airport Reports Release of Spring and Summer Flight Schedules

Lone Rock Fly Out, April 4th by John Bender



6 total. Great time. SNOWING when we landed! These pics were bumping along on the way back. Fair amount of traffic was showing on ADS-B display.



Contact
John Bender,
Fly Out
Coordinator,
for more
information

Ames Rushford Fly Ins, April 9th by John Bender

Super day! Flew to Ames for the pancake breakfast then flew to Rushford, Mn for their Chili lunch. Over 300 miles for me today. Most pics are from Rushford. Some are ADS-B traffic I was watching. I think I actually SAW the most planes today that showed up on my display. Have to be within 2 miles, and more likely within 1 mile to actually see other planes. They are out there. Just don't know it without ADS-B. Was a good crowd at both events today.



"Was a
good crowd at
both
events today."

Dubuque Fly In, April 17th by John Bender

"Good to see



Prairie Du Chien Fly Out, April 18th by John Bender

"Smooth and great temps."



Great weather going to Prairie Du Chien for 'brunch' this morning.
Smooth and great temps.

Independence Fly In Breakfast, April 20th by John Bender



Great event at KIIB. Good food. Lots of people and planes.



"Lots of people and planes."

Winter is a Great Time to Fly Little Planes!

by John Dutcher

I mentioned to John Bender that there were a lot of great FBOs to fly into in the winter time:

The first one that comes to mind is Dalhart, TX. On arrival, the boys on the flight line asked if I would like full-service or self-service fuel; self-service was a \$1.00 cheaper than full-service. Inside Larsen Aviation, there was a cabinet of fresh complimentary donuts with coffee, soda or water. On my way

out I asked if I could purchase a couple bottles of water they handed me two bottles of water and said they were free.

On the return to lowa from Yuma, AZ, I made an overnight stop at Larsen Aviation again because of their outstanding hospitality and free donuts. I arrived at 4:50 pm, got a donut, and asked about a hotel to stay, transportation and where to have a good meal. She handed me the

keys to the courtesy car and said "feel free to keep it overnight" and provided me with information about three hotels, one of which was the Best Western which offered outstanding pilot discounts and a great breakfast. I asked for a good steak house since I was in Texas. She indicated that the X 10 was the best steak house in Texas and I should check it out.

Continued on page 6

"...there were
a lot of
great FBOs
to fly into..."

Page 6 Chapter 227 Waterloo, Iowa

Winter is a Great Time to Fly Little Planes! from page 6

"...being treated like royalty."

"We highly recommend..."

I checked into the motel and headed for the steak house. Once there I asked for a beer and was told that Dalhart was a dry county. If I gave them \$10.00 for a 3-day membership, I could order a beer. Instead, I saw two gentlemen at the bar who were my age enjoying a cold beer. I approached them and offered \$10.00 for the next beer and asked if they would in return use my money and buy me a beer. We discussed the situation and within minutes a beer showed up at my table. I noticed two individuals with aviation hats on at the next table. I walked over and told them I was very impressed with their airport. They indicated they owned the crop dusting service at the airport and over the winter they decided to start a restaurant, the X 10 was their restaurant. They invited me to join them and I ordered an appetizer tray. I offered to pay for the tray but they refused and said "enjoy." After the appetizer, they had plans elsewhere and I stayed there and enjoyed a great steak; about the same time the steak arrived another beer arrived at my table. I never got a bill for my meal. After dinner, the boys at the bar invited me over for one more beer and then it was time to turn in for the night.

The next morning after a great breakfast at the Best

Western Motel, I returned the car, filled the plane with self-service, got two donuts with a cup of hot coffee and headed out to Manhattan, KS.

Did I mention I was a sucker for homemade cookies? The Million Air in Yuma, AZ has outstanding homemade fresh cookies at the counter. It is also really fun flying in. I was fifth in line behind two F16's, a Mooney, a commercial 727, and a business jet. It is fun parking a 172 by all the business jets and being treated like royalty! And flying over the mountains in a 172 is fun and exciting, 150 miles visibility.

The next winter trip was to New Orleans. The day we left it was -4 degrees in Waterloo. Six and a half hours later we arrived at Lakefront Airport, LA and it was 77 degrees. Flying over Lake Pontchartrain was as exciting as the homemade cookies at Flight Line First. Candy galore in the terminal (including the restrooms), complimentary coffee, water, and soda were provided.

John Bender, we do need to schedule a fly-in to New Orleans, the food is great!

We tried to find a restaurant that served hot beef sandwiches, but we had to force ourselves to settle for oysters on the half shell with a nice cold beer. We highly recommend Mothers Restaurant, The Irish Pub on Charles Street and Felix's off Bourbon Street.

Another great stop on the way home was Natchez's, MS. Great people, free overnight courtesy car and outstanding recommendations for food (Pig Out Restaurant) and motels. Again, John Bender, no hot beef sandwiches. The food was outstanding: pulled pork, baked beans, jambalaya and a homemade salad.

Rolla, MO was worth stopping at. Fresh oranges and a large table filled with good ole boys and conversation. We had to wait for the weather to improve before we could leave and the good ole boys told us a story about a guy who stayed there six weeks waiting for the weather to improve so that he could return to Montana. He used the courtesy car every night for weeks. That's hospitality!

What a wonderful trip experiencing all the small FBOs we had the pleasure of visiting. Flying in the winter time is a great way to get OUT of lowa!

Tech Notes -Where's Sherlock When You Need Him?! by Mike Lewis

Last month I talked about a bit of engine trouble shooting I had the opportunity to do. I'm going to share another mystery story this month. This story is an electrical (radio) story. It has to do with my Diamant.

When I first flew the Diamant I did not have a transponder installed. After about 30 or 40 hours, I elected to install a transponder and altitude encoder. The transponder was a Narco AT150 and the altitude encoder was a Narco AR850. Not sure if you are aware of the relationship between encoder and transponder so I'll enlighten (baffle?) you a little. The encoder senses pressure (altitude) through the aircraft's static system. There then is a wire harness of eleven conductors that are input to the transponder. The encoder then grounds one or more of those conductors which creates a binary code that the transponder transmits to ATC which is then decoded as an altitude. Anyway part of my installation process was to fabricate this coding harness. I got everything installed, had Larry Grumman at Niederhauser certify the installation and I was off!

About the first trip down to CID, I called approach and

got Identified. In a few minutes the controller said "eight mike lima say altitude" I replied "three point five". Silence for a few minutes and another "say altitude". Again "three point five". Approach came back and said "I'm getting various altitudes up to fifteen". I said, "Well, it's kind of bumpy up here but I don't think it's that bad!" We watched for a while and she would report my altitude on every sweep and she was right. I was all over the place. I said I'd turn off mode C and try to find out what was going on when I got back to ALO.

Next opportunity I went over to see Frank Nook at McCandless Avionics. He hooked up his ground tester, pumped down the system and it was rock solid right on. I asked Frank if that coding harness should be shielded. He said no. I had looked at other Wichita birds and none of them were shielded either, nor did the Narco instructions call for shielding.

Next step was to call Narco. Told the rep what the airplane was (Piel Diamant, wooden airframe). I asked if I should shield the coding harness. Nope! Not necessary. He gave me a few things to check, connections on the harness, etc. Checked those things. Couldn't find anything

wrong. Talked to Frank some more. He had another AT150 that he let me borrow. I installed Frank's AT150, went up and talked to ATC. Altitudes all over the place. Not the transponder. Went back to Frank do you happen to have an encoder I could borrow? Yup! Tried that. No help! I decided to make a new coding harness. Put that in - same problem. Frank then said to take his battery powered ramp checker up and see what it was reading. To use the ramp checker, we had to unplug the transponder antenna lead from the aircraft antenna and plug it into the ramp checker. I went up with the ramp checker connected. It agreed right on with my aircraft altimeter. More phone calls to Narco again - I'm sure the tech rep recognized my voice by now. He suggested something else to try. He suggested I make a "slug" which was basically just a connector with the C4 terminal connected to ground, and no other terminals wired that would transmit a code of -1200 ft. regardless of what altitude I was really at. Plug that connector into the transponder and go fly and ask ATC for altitude verification. He cautioned that this was technically not legal, but thought if I explained what we were doing, the ATC folks would be OK with it. So I

Continued on page 8

"I was all over the place."

"...I'm sure the tech rep recognized my voice by now." Page 8 Chapter 227 Waterloo, Iowa

Tech Notes

continued from page 7

"So what was going on?"

plugged in my "slug" went up and got a solid -1200 from ATC. Called Narco back. (Have you figured this one out yet?). The rep asked me what kind of airplane was this again? I described the Diamant, homebuilt, wood airframe, fabric cover. He said you might want to try putting that coding harness in a shield. New harness (number three). Talked to ATC to verify

altitudes. Eureka! Right on and rock solid!

So what was going on? The transponder was putting enough energy on the antenna, and the wood airframe was relatively transparent to that energy, that the coding harness was receiving that signal on various lines and elevating their voltage above what should have been

ground. This created an incorrect altitude code. An aluminum airframe would have presented enough blocking of the signal so shielding the harness would not have been necessary. Probably even if my transponder antenna had been farther away from the harness I would not have had the problem. Kind of a unique issue to wood, and possibly fiberglass airframes.

Multiple Aircraft Groups to Make EAA AirVenture Oshkosh 2016 'Aviation's Family Reunion' from eaa.org

Aircraft anniversaries celebrated range from 30 to 75 years

"Owners of anniversary aircraft types are encouraged to register early..."

More than a half-dozen types of airplanes will be celebrating special anniversaries in 2016, and owners of those aircraft are commemorating the occasion at EAA AirVenture Oshkosh 2016, the perfect place for aircraft and aviation people to gather.

EAA AirVenture Oshkosh 2016, the 64th annual Experimental Aircraft Association fly -in convention, is July 25-31 at Wittman Regional Airport in Oshkosh, Wisconsin.

The aircraft types celebrating anniversaries at Oshkosh are from across the spectrum including homebuilts, vintage aircraft, warbirds, aerobatic aircraft, and ultralights. Owners of anniversary aircraft types are encouraged to reg-

ister early to help ensure parking and other special events surrounding their gathering.

Among the aircraft types celebrating anniversaries at Oshkosh are:

- Van's RV-6 30 years
- Ultralights at Oshkosh 40 years
- Cessna C120/C140 70 years
- Navion 70 years
- De Havilland Chipmunk 70 years
- Interstate Cadet 75 years
- Grasshopper (L-Bird) 75 years
- Stearman Aircraft (Warbirds and Vintage), commemorating Boeing's 100th anniversary

"Along with these milestone anniversaries, there are dozens of other aircraft groups and type clubs that make EAA AirVenture their annual reunion place," said Rick Larsen, EAA's vice present of communities and member programs, who coordinates AirVenture features and attractions. "Oshkosh really is the site of aviation's family reunion. Whatever you fly or enjoy see flying, you'll find kindred spirits on our flightline."

EAA Partners with FAA, Dynon for STC Breakthrough to Upgrade Safety, Reduce Costs for Aircraft Owners from Charlie Becker, EAA Director of Chapters

EAA, in partnership with Dynon Avionics and the FAA, has been awarded a Supplemental Type Certificate (STC) to install Dynon's EFIS-D10A in certain standard category aircraft. This breakthrough STC enables the inexpensive, but very capable, avionics that have served the experimental and light-sport worlds for decades to finally have a pathway into the type-certificated



Cockpit shot closeup of EFIS

market. The Dynon system is a direct replacement for a vacuum-driven attitude indicator, and the STC currently applies to the Cessna 150, 152, and 172 series and the Piper PA-28 and PA-38 series. More aircraft are expected to be added soon.



Dusk panel shot—lighted

EAA worked extensively with the FAA and Dynon to show compliance with regulations and develop a new certification pathway for safetyenhancing equipment. long track record of the DIOA product line and its conformity to a variety of industry standards helped it become the first device accepted by the FAA in this pioneering effort. In addition to Dynon's proven reliability, the unit delivers a wealth of information to the pilot and even has an integrated angle of attack feature (with the installation of an optional probe). EAA installed the DIOA in its 1976 Cessna 172M and submitted to a

series of flight tests with an FAA test pilot, which went flawlessly.

EAA intends to begin selling the STC as soon as possible, hopefully later this spring, at a nominal price point in line with its existing autofuel STC. In addition to the



EFIS-D10A-STC-RGB Lowres

D10A, more products are actively being explored as EAA is willing to work with other manufacturers to bring down costs and reduce barriers to recreational flying.

Stay tuned for more details!

"...the unit
delivers a
wealth of
information
to the pilot..."



Find ALO
updates on
our Website,
Facebook page
and
Tower Talk

NEWSLETTER INFORMATION

If you have an article, picture, or anything else you would like to share in a future newsletter, please contact: Chris Roberts 507 Chateau Court Cedar Falls IA 50613 c) 319-240-8128 chrisr@cfu.net

Visit our website: eaa227.com





EAA CHAPTER 227 LEADERSHIP

Executive Officers

President	Warren Brecheisen	n146wb@cfu.net	319-277-2118	
Vice President	Marty Hoel	hoelm@mchsi.com	319-231-1367	
Secretary	Richard Shepherd	dodges97@aol.com	319-240-8608	
Treasurer	Dave Roberts	drdave@cfu.net	319-277-8128	
Board of Directors				
Executive Officers	See Above			
Members at Large	Dave Hummel	cfihum@cfu.net	319-266-9561	
	Robert Gutknecht	robert.gutknecht.rg@gmail.com	319-269-7970	
Past President	Dave Dunn	djrwcd@hotmail.com	319-296-2914	
Standing Committees/Positions				
Membership	Dave Hummel	cfihum@cfu.net	319-266-9561	
	Carl Campbell	annam39c@aol.com	319-234-2394	
Program Committee	Marty Hoel	hoelm@mchsi.com	319-231-1367	
	Dick Poppe	richpoppe@mchsi.com	319-287-4788	
	Scott Weinberg	scottw@butler-bremer.com	319-404-4401	
Nominating Committee	Dave Dunn	djrwcd@hotmail.com	319-296-2914	
	Dave Hummel	cfihum@cfu.net	319-266-9561	
	Dave Roberts	drdave@cfu.net	319-277-8128	
Budget	Dave Roberts	drdave@cfu.net	319-277-8128	
Newsletter	Chris Roberts	chrisr@cfu.net	319-240-8128	
Webmaster	Dave Roberts	drdave@cfu.net	319-277-8128	
Public Relations	Chris Roberts	chrisr@cfu.net	319-240-8128	
FlyOut Coordinator	John Bender	JABGood@aol.com	319-827-3513	
Young Eagles				
Coordinators	Matt & Rebecca Evers	matthewevers@mchsi.com	319-266-0421	
Tech Advisor	Mike Lewis	mlewis@cfu.net	319-266-6461	
Tool Manager	Doug Mattson	dougmattson@gmail.com	319-939-0179	
Historian	Dave Dunn	djrwcd@hotmail.com	319-296-2914	

Do you have anything aviation related that you would like to sell? Please let us know so we can include items in **CLASSIFIED ADS**

Experimental Aircraft Association Chapter 227 publishes Tower Talk for the use education and enjoyment of Chapter members and others to whom it is provided. Chapter and national events, news of members, member projects, activities and general aviation items of interest to the membership are included. Editorial content is the opinion of the contributor and does not necessarily reflect the position of Chapter 227 or EAA and no claim is made for technical accuracy of material presented. Meetings are normally held the third Tuesday of each month in the Airport Conference Room. Please contact any officer for information about Chapter activities.